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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,526	07/20/2000	Bruce E. Novich	1596C3	2610
7590	07/02/2004		EXAMINER	
PPG Industries Inc			GRAY, JILL M	
One PPG Place			ART UNIT	PAPER NUMBER
Pittsburgh, PA 15272			1774	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/620,526	NOVICH ET AL. <i>eb</i>
Examiner	Art Unit	
Jill M. Gray	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-56 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) 1-56 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date ____.

- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

Claims 9-11 – organic material;

Claim 12 – inorganic material;

Claims 13-14 – lamellar particles;

Claims 15-17 – composite particles;

Claims 33-43 – mixture of particles.

If claims 9-11 are elected, further election is required between claims 10 – thermosetting particles and claim 11 – thermoplastic particles.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

An office action on the merits of the claims accompanies this election of species as permitted by MPEP 810.

Specification

The abstract of the disclosure is objected to because it is too long and should be a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 13, 18-32, and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al, 4,006,272 (Sakaguchi) in view of Raghupathi et al, 6,139,958 (Raghupathi).

Sakaguchi teaches glass fiber mats impregnated with a binder. The binder can be applied as a dispersion or used in the dry powder state and uniformly distributed on the glass fiber substrate as required by claims 1-5, 9-11, and 51. See column 3, lines 65-67. When the binder is applied in the dry powder state, a lubricant of the type set forth in claim 22 and inorganic particle can be added to improve flowability, per claim 13. See column 4, lines 3-7. The binder is selected from organic materials such as thermoplastic and thermosetting materials as required by claims 25-26 and 53-54 and can be polyester, per claims 27-28 and 55-56, and comprises a component having one or more functional groups, as required by claims 31 and 32. See Examples. Regarding claims 20-21, 23-24 and 29-30, these claims are drawn to the amount of particles, lubricious material and film forming material in the composition. It is the examiner's position that it is an established principle of law that a limitation merely with respect to proportions in a composition of matter or process will not support patentability unless such limitation is "critical", wherein the criticality of such limitation must be disclosed in

the specification or affidavit. *In re Cole*, 140 USPQ 230 (CCPA 1964). In the present case, there is no clear evidence of criticality of the proportions in the present claimed composition. Regarding claim 18, the particles necessarily provide some degree of interstitial spacing. Regarding claim 19, this claim is drawn to the size of the particles, wherein size is not ordinarily a matter of invention. Sakaguchi does not teach the specific type of glass.

Raghupathi teaches that glass fibers of the type contemplated by applicants in claims 6-8 can be used for the production of glass fiber mats. See column 8, lines 15-20 and column 1, lines 20-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the glass fibers of Sakaguchi, any glass fibers known in the art, such as those taught by Raghupathi and contemplated by applicants, with the reasonable expectation of success of obtaining a glass fiber mat having great transparency.

Therefore, the combined teachings of Sakaguchi and Raghupathi would have rendered obvious the invention as claimed in claims 1-11, 13, 18-32, and 51-56.

Claims 1-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotera et al, 4,340,519 (Kotera) in view of Raghupathi et al, 6,139,958 (Raghupathi) as applied above to claims 1-11, 13, and 18-32, and 51-56.

Kotera teaches a polyester resin composition that can be applied to various fiber substrates (column 8, lines 9-12). The resin composition can contain conventional lubricating agents (per claim 22) and inorganic lamellar particles such as graphite, (per claims 13-14, 33, 44-52). See column 8, line 33 and lines 53-57. The composition can

be applied to glass products, as required by claim 4-5. See column 9, line 19. In addition, in Example 25, Kotera teaches that the resin composition can be a powdered coating composition (claim 3) that comprises the polyester (claims 9-11, 25-28, 34-35, and 53-56), titanium oxide (claim 1) POLYFLOW (claim 1), a crosslinking agent and dibutyl tin dilaurate (claims 31-32), and other components such as silicone oxide or silicone flow improvers (claim 12, column 7, lines 62-65) wherein the coating is applied electrostatically. As to claims 15-17, it would have been obvious to modify the inorganic particles such as titanium dioxide of Kotera by coating said particles with a coupling agent or compatibilization agent to improve dispersibility within the composition. Regarding claims 20-21, 23-24, 29-30, and 38-43, these claims are drawn to the amount of particles, lubricious material and film forming material in the composition. It is the examiner's position that it is an established principle of law that a limitation merely with respect to proportions in a composition of matter or process will not support patentability unless such limitation is "critical", wherein the criticality of such limitation must be disclosed in the specification or affidavit. *In re Cole*, 140 USPQ 230 (CCPA 1964). In the present case, there is no clear evidence of criticality of the proportions in the present claimed composition. Regarding claim 18, the particles necessarily provide some degree of interstitial spacing. Regarding claims 19 and 37, this claim is drawn to the size of the particles, wherein size is not ordinarily a matter of invention. Kotera does not specifically teach glass fibers of the type contemplated by applicants in claims 6-8.

Raghupathi is as set forth above and teaches that glass fibers of the type contemplated by applicants in claims 6-8 can be used for the production of glass fiber

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mats. See column 8, lines 15-20 and column 1, lines 20-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Kotera by using as the glass substrate, a glass cloth or mat as taught by Raghupathi, wherein the specific glass used is any fiberizable glass material known to the art, such as those contemplated by applicants and as taught by Raghupathi with the reasonable expectation of success of forming glass products having excellent transparency.

Accordingly, the combined teachings of Kotera and Raghupathi would have rendered obvious the invention as claimed in the present claims 1-56.

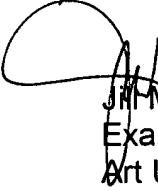
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JHM. Gray
Examiner
Art Unit 1774

jmg